CITY OF NEW BEDFORD
CONTRIBUTORY RETIREMENT SYSTEM

Actuarial Valuation Report

January 1, 2007

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Report Summary:

Highlights	**January 1, 2006**	**January 1, 2007**
Contributions		
Funding Schedule FY 2008	$22,466,546	$22,466,545
Funding Schedule FY 2009	23,331,399	25,877,801
Funded Ratios		
GAS No. 25	46.1%	44.9%
Participants		
Actives	2,289	2,299
Retirees and Beneficiaries	1,371	1,385
Vested	0	0
Inactives	288	342
Disabled	332	336
Total	4,280	4,362
Payroll		
Payroll of Active Members	$81,884,807	$86,659,224
Average Payroll	35,773	37,694
Normal Cost		
Employer	3,665,382	4,563,220
Employee	6,479,086	6,973,172
Administrative Expenses	410,000	425,000
Total	10,554,468	11,961,392
Actuarial Accrued Liabilities		
Actives	185,220,994	208,649,221
Retirees, Beneficiaries, Disabilities and Inactives	229,187,551	260,412,530
Total	416,761,645	469,061,751
Actuarial Value of Assets	192,032,773	210,446,468
Unfunded Actuarial Accrued Liabilities	$224,728,872	$258,615,283

Introduction

This report presents the findings of an actuarial valuation as of January 1, 2007, of New Bedford Contributory Retirement System.

The actuarial valuation is based on:

- Provisions Chapter 32 of the Massachusetts General Laws, "M.G.L", as of January 1, 2007.
- Employee data provided by the Retirement Board
- Asset information reported to the Public Employee Retirement Administration Commission by the City of New Bedford Contributory Retirement System
- Actuarial assumptions approved by the Retirement Board

The valuation and appropriation forecast are prepared in accordance with Chapter 32 of the M.G.L. as of January 1, 2007.

The valuation and forecast do not account for:

- Any subsequent changes in the law
- Chapter 32 of the M.G.L., Section 3(8)(c) transfers between systems
- State-mandated benefits
- Cost-of-living increases granted to retired members between 1982 and 1997. The cost of these benefits has been assumed by the State under Proposition Two and One-Half.

Actuarial Experience

In performing the actuarial valuation, various assumptions are made regarding such factors as mortality, retirement, disability, and withdrawal rates as well as both payroll, salary increases, and investment returns. A comparison of the current valuation and the prior valuation is made to determine how closely actual experience corresponded to anticipated occurrences. This analysis of the system provides insight into the overall quality of the actuarial assumptions and helps explain any change in the annual appropriation.

During the preceding year, the total unfunded actuarial accrued liability increased by 7.0% to $240,728,872. The increase is the result of net unfavorable actuarial experience during the year. The actuarial value of assets for 2006 had a return of 10.25%. The investment return exceeded the 8.5% assumption, generating a gain of $3,352,843. However, the liabilities incurred a loss of $17,089,338, for a total net loss of $13,736,495. Gains and losses by source are as follows:

	(Gain) / Loss
Investment Return	(3,352,843)
Salary Increases	3,169,388
New Participants	190,599
Active – Retirements	1,870,087
Active – Terminations	549,721
Active – Mortality	(32,862)
Active – Disability	2,345,063
Inactive – Mortality and Data adjustments	4,052,824
Other, including service buybacks and data	4,944,518
Total (Gain) / Loss	13,736,495

The board approved a change in the assumed mortality to the RP2000 mortality table with projection scale AA for 10 years and the investment return assumption to 8.25%. These changes increased the normal cost and the unfunded accrued liability by $679,066 and $18,121,469, respectively.

Actuarial Costs and Liabilities:

Normal Costs

The normal cost is the sum of the individual normal costs determined for each member as if the assumptions underlying the cost determinations had been exactly realized. An individual normal cost represents that part of the cost of a member's future benefits which are assigned to the current year as if the costs are to remain level as a percentage of the member's pay. Benefits payable under all circumstances (i.e., retirement, death, disability, and terminations) are included in this calculation. Anticipated employee contributions to be made during the year are subtracted from the total normal cost to determine employer normal cost. The total normal cost is divided by total payroll to determine the normal cost as a percent of pay. The normal cost is shown in Table I.

Table I

	January 1, 2006	January 1, 2007
Superannuation	$6,978,149	$8,158,650
Termination	998,605	1,054,092
Death	554,662	541,363
Disability	1,613,052	1,782,287
Administrative Expenses	410,000	425,000
Total Normal Cost	10,554,468	11,961,392
% of Pay	12.9%	13.8%
Employee Contributions	6,479,086	6,973,172
% of Pay	7.9%	8.0%
Employer Normal Cost	$4,075,382	$4,988,220
% of Pay	5.0%	5.8%

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Present Value of Actuarial Accrued Liabilities

The actuarial accrued liabilities (AAL) represents today's value of all benefits based on the past service of the actives and inactives. The AAL can be compared to the assets to determine the funded status of the Plan. The value of these earned benefits is shown in Table II below.

Table II

	January 1, 2006	January 1, 2007
Actives		
Superannuations	$162,640,114	$184,425,552
Termination	3,631,754	3,594,962
Death	6,295,219	6,037,133
Disability	12,653,907	14,591,574
Retirees and Inactives		
Retirees and Beneficiaries	156,928,302	173,008,249
Vested	0	0
Terminated (Refund)	2,353,100	2,886,678
Disabled	72,259,249	84,517,603
Total	$416,761,645	$469,061,751

Present Value of Future Benefits

The present value of future benefits represents today's value of all benefits earned by the inactive participants as well as all benefits earned and expected to be earned in the coming years by the active participants. The difference between the present value of future benefits and the present value of actuarial accrued liabilities is the value of benefits to be earned in the coming years. The value of the total expected benefits is shown in Table III.

Table III

	January 1, 2006	January 1, 2007
Actives		
Superannuation	$225,802,065	$259,910,746
Termination	7,885,519	8,066,352
Death	10,936,810	10,650,290
Disability	29,232,950	33,543,701
Retirees and Inactives		
Retirees and Beneficiaries	156,928,302	173,008,249
Vested	0	0
Terminated (Refund)	2,353,100	2,886,678
Disabled	72,259,249	84,517,603
Total	$505,397,995	$572,583,619

Funded Status and Appropriations:

Market Value of Plan Assets

The trust fund composition on a market value basis is shown in Table IV.

Table IV

	January 1, 2006	January 1, 2007
Cash equivalents	$5,486,868	$4,011,971
Short term investments	0	0
Fixed income securities	45,871,778	44,556,957
Equities	93,298,754	106,020,496
International	26,473,387	32,890,951
Real Estate	18,429,074	21,669,256
Venture Capital	0	0
Other	10,720,144	16,364,526
Accounts receivable	293,880	418,433
Accounts payable	(783,788)	(828,363)
Accrued income	645,836	609,350
Total Market Value	$200,435,933	$225,713,577
Total Actuarial Value	$192,032,773	$210,446,468

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Actuarial Value of Assets

The actuarial value of assets is determined by projecting the market value of assets as of the beginning of the prior plan year with the assumed rate of return during that year (8.5%) and accounting for deposits and disbursements with interest at the assumed rate of return. An adjustment is then applied to recognize the difference between the actual investment return and expected return over a five year period. This preliminary actuarial value is not allowed to differ from the market value of assets by more than 10%. The calculation of the actuarial value of assets as of January 1, 2007 is presented in Table V.

Table V

		January 1, 2007
(1)	Market value at January 1, 2006	$200,435,933
(2)	2006 Contributions	$30,545,954
(3)	2006 Payments	($31,756,441)
(4)	Net interest adjustment at 8.5% on (1), (2), and (3) to December 31, 2006	$16,985,609
(5)	Expected market value on January 1, 2007 (1) + (2) + (3) + (4)	$216,211,054
(6)	Actual market value on January 1, 2007	$225,713,577
(7)	2006 (Gain) / Loss	($9,502,523)
(8)	80% of 2006 (Gain) / Loss	($7,602,018)
(9)	2005 (Gain) / Loss	($2,271,995)
(10)	60% of 2005 (Gain) / Loss	($1,363,197)
(11)	2004 (Gain) / Loss	($5,785,339)
(12)	40% of 2004 (Gain) / Loss	($2,314,136)
(13)	2003 (Gain) / Loss	($19,938,790)
(14)	20% of 2003 (Gain) / Loss	($3,987,758)
(15)	Actuarial value on January 1, 2007, (6) + (8) + (10) + (12) + (14)	$210,446,468
(16)	but not less than 90% nor greater than 110% of (6)	$210,446,468
(17)	Ratio of actuarial value to market value	93.24%
(18)	Market Value return for 2006	13.26%
(19)	Actuarial Value return for 2006	10.25%

Unfunded Actuarial Accrued Liabilities

Under the Entry Age Normal Actuarial Cost Method, the Actuarial Accrued Liability represents what the accumulated assets would have been as of the valuation date if:

- current plan provisions and assumptions had always been in effect,
- experience conformed exactly to assumptions, and
- the normal cost had been contributed each year since inception.

The actuarial value of the Fund's assets as of the end of the prior year are subtracted from the Actuarial Accrued Liability (AAL) to determine the Unfunded Actuarial Accrued Liability (UAAL) as of the valuation date. Over time, annual pension contributions will accumulate Plan assets equal to the AAL, and the UAAL will be eliminated. Thereafter, annual contributions equal to the normal cost will keep the Plan's assets and liabilities in balance. The UAAL is developed in Table VI.

Table VI

	January 1, 2006	January 1, 2007
Actuarial Accrued Liability	$416,761,645	$469,061,751
Actuarial Assets	192,032,773	210,446,468
Unfunded Actuarial Accrued Liability	$224,728,872	$258,615,283
Funded Status	46.1%	44.9%

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Appropriations

The pension appropriation for the upcoming fiscal years have been calculated in accordance with the requirements set forth in Section 22D of Chapter 32 of the Massachusetts General Laws. These amounts were calculated to comply with the June 30, 2028, full funding mandate for all accrued liabilities. The pension appropriation is the sum of the:

- Employer normal cost,
- Increasing amortization of the unfunded actuarial accrued liability by June 30, 2026
  $ 253,449,730 over 19 years with 4.5% increasing payments
- Level amortization of the Early Retirement Incentive by June 30, 2019
  $ 5,165,553 over 12 years
- Interest adjustment for payments deposited August 1st

The pension appropriation is shown in Table VII.

Table VII

	January 1, 2006	January 1, 2007
Normal cost	$4,075,382	$4,988,220
Amortization payment of the prior accrued liability	15,848,651	17,983,551
Amortization payment of 2002 ERI liability	648,207	641,430
Total cost	$20,572,240	$23,613,201
% of Pay	25.1%	27.2%
Fiscal 2008 cost	$22,466,546	$22,466,545
Fiscal 2009 cost	$23,331,399	$25,877,801

Appropriation Forecast

The following exhibit forecasts employer and employee contributions over the next 32 years under the adopted funding schedule.

Note that the forecast is based upon an "open group" method. This method assumes that sufficient employees will be hired each year to keep the number constant. The total payroll of the system is expected to increase 4.5% per year. The employee contribution rate is expected to increase to 10.5% by 2028 as members contributing base percentages 5%, 7%, and 8% are replaced by new members, whose base contribution is 9%. Payments are assumed to be made at the beginning of the year.

The employer total cost is expected to increase during the next 19 years until the unfunded liabilities are completely paid off, at which time only the normal cost will remain. The total cost represents 28.6% of payroll, decreasing to 25.6% by the time the unfunded liabilities are fully paid off, leaving only a normal cost of 3.5% thereafter. The decrease in the cost as a percentage of payroll is a result of the increase in member deductions.

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Appropriation Forecast

Fiscal Year Ending	Payroll*	Employee Contribution	Employer Normal Cost with Interest	Amortization Payments with Interest	Employer Total Cost with Interest	Employer Total Cost % of Payroll	Funded Ratio %**
2008	$86,659,224	$6,973,172	$5,224,305	$17,242,240	$22,466,545	25.9	44.9
2009	$90,558,889	$7,398,051	$5,343,055	$20,534,746	$25,877,801	28.6	46.8
2010	$94,634,039	$7,847,048	$5,461,914	$21,428,579	$26,890,493	28.4	48.9
2011	$98,892,571	$8,321,474	$5,580,650	$22,362,634	$27,943,284	28.3	51.1
2012	$103,342,737	$8,822,707	$5,699,012	$23,338,722	$29,037,734	28.1	53.4
2013	$107,993,160	$9,352,201	$5,816,726	$24,358,734	$30,175,460	27.9	55.8
2014	$112,852,852	$9,911,484	$5,933,493	$25,424,647	$31,358,140	27.8	58.3
2015	$117,931,230	$10,502,163	$6,048,991	$26,538,526	$32,587,517	27.6	61.0
2016	$123,238,136	$11,125,933	$6,162,868	$27,702,529	$33,865,397	27.5	63.7
2017	$128,783,852	$11,784,575	$6,274,745	$28,918,912	$35,193,657	27.3	66.6
2018	$134,579,125	$12,479,966	$6,384,212	$30,190,033	$36,574,245	27.2	69.5
2019	$140,635,186	$13,214,077	$6,490,823	$31,518,354	$38,009,177	27.0	72.5
2020	$146,963,769	$13,988,987	$6,594,102	$32,234,661	$38,828,763	26.4	75.7
2021	$153,577,139	$14,806,880	$6,693,532	$33,685,221	$40,378,753	26.3	78.8
2022	$160,488,110	$15,670,055	$6,788,557	$35,201,056	$41,989,613	26.2	82.1
2023	$167,710,075	$16,580,933	$6,878,581	$36,785,104	$43,663,685	26.0	85.5
2024	$175,257,028	$17,542,057	$6,962,959	$38,440,433	$45,403,392	25.9	88.9
2025	$183,143,594	$18,556,107	$7,041,003	$40,170,253	$47,211,256	25.8	92.5
2026	$191,385,056	$19,625,898	$7,111,970	$41,977,914	$49,089,884	25.6	96.2
2027	$199,997,384	$20,754,394	$7,175,067	$0	$7,175,067	3.6	100.0
2028	$208,997,266	$21,944,713	$7,229,441	$0	$7,229,441	3.5	100.0
2029	$218,402,143	$22,932,225	$7,554,765	$0	$7,554,765	3.5	100.0
2030	$228,230,239	$23,964,175	$7,894,730	$0	$7,894,730	3.5	100.0
2031	$238,500,600	$25,042,563	$8,249,993	$0	$8,249,993	3.5	100.0
2032	$249,233,127	$26,169,478	$8,621,242	$0	$8,621,242	3.5	100.0
2033	$260,448,618	$27,347,105	$9,009,198	$0	$9,009,198	3.5	100.0
2034	$272,168,806	$28,577,725	$9,414,612	$0	$9,414,612	3.5	100.0
2035	$284,416,402	$29,863,722	$9,838,270	$0	$9,838,270	3.5	100.0
2036	$297,215,140	$31,207,590	$10,280,992	$0	$10,280,992	3.5	100.0
2037	$310,589,821	$32,611,931	$10,743,637	$0	$10,743,637	3.5	100.0
2038	$324,566,363	$34,079,468	$11,227,100	$0	$11,227,100	3.5	100.0
2039	$339,171,850	$35,613,044	$11,732,320	$0	$11,732,320	3.5	100.0

* Calendar basis

** Beginning of Fiscal Year

GASB Statements No. 25 and No. 27

Effective for periods beginning after June 15, 1997, the Governmental Accounting Standards Board (GASB) requires the disclosure of pension related liabilities for public employer financial statements in accordance with Statements 25 and 27. These statements, which replace GASB Statement No. 5, must be adhered to by any public employee retirement system that follows Generally Accepted Accounting Principles (GAAP).

These disclosures are intended to establish a reporting framework that distinguishes between:

- current financial information about plan assets and financial activities,
- actuarially determined information from a long-term perspective,
- the funded status of the plan, and
- progress being made in accumulating sufficient assets to pay benefits when due.

Footnote disclosures required by GASB Statement No. 25 and 27 include a description of the plan, a summary of significant accounting policies, and information about contributions, legally required reserves, and investment concentrations. As a result of the oversight of the Public Employees Retirement Administration Commission (PERAC) and the conversion of unpaid contributions to pension related debt, the Net Pension Obligation (NPO) as required by Statement No. 27 will effectively always be equal to $0. The required disclosure information is shown in Table VIII.

Table VIII

		January 1, 2006	January 1, 2007
(1)	Actuarial Accrued Liability	$416,761,645	$469,061,751
(2)	Actuarial Value of Assets	192,032,773	210,446,468
(3)	Unfunded Actuarial Accrued Liability	224,728,872	258,615,283
(4)	Funded Ratio (2)/(1)	46.1%	44.9%
(5)	Covered Payroll	$81,884,807	$86,659,224
(6)	UAAL as a percentage of payroll: (3)/(5)	274.4%	298.4%
(7)	Annual Required Contribution (ARC)	$20,814,000	$22,466,545
(8)	Net Pension Obligation	$0	$0

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PERAC Annual Statement
APPENDIX PAGE 3
ACTUARIAL VALUATION AND ASSUMPTIONS

The most recent actuarial valuation of the System was prepared by Buck Consultants as of January 1, 2007.

The normal cost for employees on that date was:	$6,973,172	8.0% of pay
The normal cost for the employer was:	4,563,220	5.3% of pay

The actuarial liability for active members was:	$208,649,221
The actuarial liability for retired and inactive members was:	260,412,530
Total actuarial accrued liability:	469,061,751
System assets as of that date:	210,446,468
Unfunded actuarial accrued liability:	$258,615,283

The ratio of system's assets to total actuarial liability was 44.9%

The principal actuarial assumptions used in the valuation are as follows:

Investment Return:	8.25%
Rate of Salary Increase:	5.00%

SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (b)	Unfunded Actuarial Accrued Liability (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a percent of Covered Payroll (b-a)/c
01/01/07	$210,446,468	$469,061,751	$258,615,283	44.9%	$86,659,224	298.4%
01/01/06	192,032,773	416,761,645	224,728,872	46.1%	81,884,807	274.4%
01/01/04	175,663,857	380,950,456	205,286,599	46.1%	75,414,151	272.2%
01/01/01	157,129,409	305,813,631	148,684,222	51.4%	75,089,435	198.0%
01/01/98	133,140,386	248,033,340	114,892,954	53.7%	63,312,483	181.5%
01/01/96	84,143,582	189,485,031	105,341,449	44.4%	45,453,241	231.8%
01/01/92	67,895,696	177,053,757	109,158,061	38.3%	41,886,567	260.6%

Attach Copy of Current Approved Funding Schedule

EXHIBITS

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Age/Service Distribution with Salary as of January 1, 2007

Attained Age	Average Salary <5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
< 20	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
20-24	36	0	0	0	0	0	0	0	0	36
	26,267	0	0	0	0	0	0	0	0	26,267
25-29	130	12	0	0	0	0	0	0	0	142
	32,661	35,355	0	0	0	0	0	0	0	32,888
30-34	106	70	14	0	0	0	0	0	0	190
	35,358	44,293	43,979	0	0	0	0	0	0	39,285
35-39	65	64	84	22	0	0	0	0	0	235
	30,373	40,811	55,827	50,801	0	0	0	0	0	44,227
40-44	85	84	83	72	12	1	0	0	0	337
	29,390	34,237	48,536	50,979	42,528	57,601	0	0	0	40,478
45-49	71	79	65	59	54	6	0	0	0	334
	24,046	29,329	39,822	45,233	51,074	60,433	0	0	0	37,132
50-54	57	68	60	52	43	48	23	0	0	351
	26,520	31,627	34,370	35,287	44,348	68,016	42,520	0	0	39,057
55-59	43	68	46	37	39	35	40	24	0	332
	24,570	31,694	31,260	30,589	41,029	51,256	54,869	46,328	0	37,597
60-64	33	44	48	28	34	23	14	7	2	233
	27,854	29,173	31,085	31,611	30,870	36,612	57,001	42,176	49,671	32,894
65-69	4	15	19	10	7	5	2	4	1	67
	23,910	25,032	29,235	28,194	39,794	35,482	25,744	46,961	63,447	30,855
70+	4	4	10	7	3	4	3	4	3	42
	22,615	21,691	27,447	24,703	20,037	32,544	32,885	28,851	63,821	29,058
Total Employees	634	508	429	287	192	122	82	39	6	2,299
Average Salary	29,641	34,215	41,362	40,988	42,519	54,333	50,255	43,855	59,042	37,694

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Retiree Distribution as of January 1, 2007

	Number of Employees			Total Payments		
Attained Age	Male	Female	Total	Male	Female	Total
< 20	0	0	0	0	0	0
20-24	0	0	0	0	0	0
25-29	0	0	0	0	0	0
30-34	0	0	0	0	0	0
35-39	0	0	0	0	0	0
40-44	1	0	1	7,920	0	7,920
45-49	4	1	5	27,545	5,791	33,336
50-54	4	3	7	60,273	12,005	72,278
55-59	58	24	82	2,008,461	269,020	2,277,481
60-64	96	65	161	2,689,744	794,028	3,483,772
65-69	105	97	202	2,348,531	1,212,000	3,560,531
70-74	100	110	210	1,850,872	1,246,851	3,097,723
75-79	118	103	221	1,965,011	854,755	2,819,766
80-84	147	92	239	2,031,085	653,175	2,684,260
85-89	106	68	174	1,287,571	501,359	1,788,930
90-94	50	17	67	617,071	70,318	687,389
95-99	12	6	18	105,167	35,862	141,029
Total	801	586	1387	14,999,253	5,655,163	20,654,416
Average (Age/Payment)	75.5	74.8	75.2	18,726	9,650	14,891
Frequency Percent	57.8	42.2	100	72.6	27.4	100

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Disabled Retiree Distribution as of January 1, 2007

	Number of Employees			Total Payments		
Attained Age	Male	Female	Total	Male	Female	Total
< 20	0	0	0	0	0	0
20-24	0	0	0	0	0	0
25-29	0	0	0	0	0	0
30-34	2	0	2	74,865	0	74,865
35-39	5	0	5	142,802	0	142,802
40-44	4	1	5	114,221	47,794	162,015
45-49	18	0	18	551,310	0	551,310
50-54	21	4	25	645,548	48,350	693,898
55-59	46	6	52	1,491,880	106,286	1,598,166
60-64	51	6	57	1,623,279	98,757	1,722,037
65-69	41	2	43	1,083,693	43,196	1,126,889
70-74	36	1	37	986,901	20,141	1,007,042
75-79	22	4	26	523,530	52,571	576,101
80-84	30	1	31	595,731	4,357	600,088
85-89	22	2	24	364,699	10,796	375,494
90-94	10	1	11	161,689	9,651	171,340
95-99	0	0	0	0	0	0
Total	308	28	336	8,360,149	441,899	8,802,048
Average (Age/Payment)	66.8	65.5	66.7	27,143	15,782	26,197
Frequency Percent	91.7	8.3	100	95	5	100

EXHIBIT 4 - CASHFLOW FORECAST:

The following is a 30 year forecast of benefit payments net of state reimbursable COLA payments, Contribution Income and Investment Returns.

Plan Year Ending	Benefit Payments	Employee Contributions	Employer Contributions	Investment Returns	Net change in plan assets
2007	$30,717,720	$6,973,172	$22,466,545	$19,329,805	$18,051,802
2008	31,603,309	7,398,051	25,877,801	18,385,128	20,057,671
2009	32,428,540	7,847,048	26,890,493	20,047,531	22,356,531
2010	33,461,075	8,321,474	27,943,284	21,893,300	24,696,984
2011	34,551,719	8,822,707	29,037,734	23,932,006	27,240,728
2012	35,894,366	9,352,201	30,175,460	26,172,689	29,805,985
2013	37,310,393	9,911,484	31,358,140	28,624,465	32,583,696
2014	38,750,547	10,502,163	32,587,517	31,306,972	35,646,104
2015	40,296,922	11,125,933	33,865,397	34,240,507	38,934,915
2016	41,864,671	11,784,575	35,193,657	37,447,313	42,560,875
2017	43,611,661	12,479,966	36,574,245	40,948,963	46,391,513
2018	45,431,552	13,214,077	38,009,177	44,766,791	50,558,493
2019	47,327,386	13,988,987	38,828,763	48,906,016	54,396,380
2020	49,302,332	14,806,880	40,378,753	53,384,643	59,267,944
2021	51,359,692	15,670,055	41,989,613	58,265,429	64,565,406
2022	53,502,904	16,580,933	43,663,685	63,583,549	70,325,263
2023	55,735,551	17,542,057	45,403,392	69,377,197	76,587,095
2024	58,061,365	18,556,107	47,211,256	75,687,829	83,393,827
2025	60,484,234	19,625,898	49,089,884	82,560,452	90,792,000
2026	63,008,209	20,754,394	7,175,067	88,983,269	53,904,521
2027	65,637,507	21,944,713	7,229,441	93,376,330	56,912,977
2028	68,376,525	22,932,225	7,554,765	98,003,372	60,113,837
2029	71,229,840	23,964,175	7,894,730	102,891,772	63,520,837
2030	74,202,222	25,042,563	8,249,993	108,058,433	67,148,767
2031	77,298,641	26,169,478	8,621,242	113,521,471	71,013,551
2032	80,524,271	27,347,105	9,009,198	119,300,310	75,132,341
2033	83,884,505	28,577,725	9,414,612	125,415,785	79,523,616
2034	87,384,960	29,863,722	9,838,270	131,890,251	84,207,283
2035	91,031,487	31,207,590	10,280,992	138,747,703	89,204,798
2036	94,086,834	32,611,931	10,743,637	146,043,953	95,312,687

amounts in thousands

EXHIBIT 5 – SUMMARY OF PLAN PROVISIONS:

This summary is prepared in accordance with Chapter 32 as of January 1, 2007, and does not take into account any subsequent changes.

1. Administration

Each of the 107 contributory retirement systems for public employees of the Commonwealth of Massachusetts are guided by the applicable provisions of Chapter 32 of the Massachusetts General Laws and other applicable statutes. Although these boards operate semi-independently, there is a uniform set of rules governing benefits, eligibility, contributions, financing, and accounting.

2. Participation

Participation is mandatory for all full-time employees whose employment commences prior to age 65. Eligibility with respect to part-time, professional, temporary, or intermittent employment is governed by the local board. Membership is optional for certain elected officials, State officials appointed by the Governor, and certain hospital interns.

There are four classes of membership as follows:

(i) Group 1: Most general employees in State and local government

(ii) Group 2: Certain specified hazardous duty positions

(iii) Group 3: State police officers and inspectors

(iv) Group 4: Local police officers, firefighters, and designated employees of the municipal light department.

For members in more than one group, participation will be proportional.

3. Salary

Salary is defined as gross regular compensation. Salary does not include bonuses, overtime, severance pay, unused sick leave credit, or other similar compensation.

4. Member Contributions

Member contributions vary depending upon date hired as follows:

Date of Hire	Member Contribution Rate
Prior to 1975	5.0% of Salary
1975 to 1983	7.0% of Salary
1984 to 1996	8.0% of Salary
1996 and Later plus	9.0% of Salary
1979 and Later	2.0% of Salary in excess of $30,000

5. Average Salary

Average salary is used to determine a participant's benefit. It is defined as the average salary during the three consecutive-year period that produces the highest average. (Alternatively, if a greater amount results, it is the average rate of salary earned during the period or periods, whether or not consecutive, that constitutes the last three years preceding retirement.)

6. Creditable Service

In general, creditable service is awarded during the period in which a member contributes to the retirement system.

7. <u>Service Retirement</u>

a. <u>Eligibility</u>:

For an employee to be eligible for service retirement (also referred to as superannuation), one of the following conditions must be met:

(i) completion of 20 years of service

(ii) for an employee hired prior to January 1, 1978, attainment of age 55 as an active member

(iii) for an employee hired on or after January 1, 1978, attainment of age 55 as an active member and completion of ten years of service

b. <u>Benefit Amount</u>:

The retirement allowance is determined as a product of the participant's Benefit Rate times Average Salary times Creditable Service, where Benefit Rate is determined from the following table:

Age at Retirement	Percentage of Average Salary Group 1	Group 2	Group 4
65 or Over	.025	.025	.025
64	.024	.025	.025
63	.023	.025	.025
62	.022	.025	.025
61	.021	.025	.025
60	.020	.025	.025
59	.019	.024	.025
58	.018	.023	.025
57	.017	.022	.025
56	.016	.021	.025
55	.015	.020	.025
54	.014	.014	.024
53	.013	.013	.023
52	.012	.012	.022
51	.011	.011	.021
50	.010	.010	.020
49	.009	.009	.019
48	.008	.008	.018
47	.007	.007	.017
46	.006	.006	.016
45	.005	.005	.015
44	.004	.004	.004
43	.003	.003	.003
42	.002	.002	.002
41	.001	.001	.001

8. Deferred Vested Retirement

a. Eligibility:

A participant who has completed ten or more years of creditable service is eligible for a deferred vested retirement benefit. If termination is involuntary, the participant is vested after six years.

b. Benefit Amount:

The participant's accrued benefit is payable commencing at age 55, or may be deferred until later at the employee's option.

c. Refund of Contributions:

In lieu of the deferred pension benefit, a member may elect to receive a refund of their accumulated contributions. Members with ten or more years of service are entitled to 100% of the credited interest on their contributions. Members with five to ten years of service are entitled to 50% of the credited interest on their contributions. No credited interest is provided for members with less than five years of service.

9. Accidental Disability

a. Eligibility:

Participants are eligible for an accidental disability benefit, regardless of service or age, if they become permanently and totally incapacitated for further duty as a result of personal injury sustained while in the performance of duties.

b. Benefit Amount:

The accidental disability amount is 72% of annual salary plus $450 per year for each child plus an additional annuity based upon accumulated Member Contributions with credited interest.

10. Ordinary Disability

a. Eligibility:

An ordinary disability occurs when a member becomes permanently and totally disabled due to sickness or injury that is not job related. In order to be eligible for an ordinary disability benefit, a member must have ten years of service (and be less than age 55).

b. Benefit Amount:

The ordinary disability amount is equal to the accrued retirement benefit as if the member were age 55. If the member was a veteran, the benefit is 50% of the member's final rate of Salary during the preceding 12 months, plus an annuity based upon accumulated Member Contributions plus credited interest. If the participant is over age 55, he will receive not less than the superannuation allowance to which he is entitled.

11. Survivor Benefits

a. Occupational Death:

The survivors of a member who dies due to an occupational injury will be entitled to a lump sum return of contributions plus a pension benefit equal to 72% of the participant's annual Salary.

b. Non-Occupational Death:

Upon the death of a member other than due to an occupational injury, the designated beneficiary will be entitled to a retirement benefit as if Option C had been elected with a minimum of $250 per month to the surviving spouse, plus $120 for the first child, plus $90 for each additional child. If no beneficiary is designated and if the employee worked two years, and is married at least one year, the spouse may elect benefits. If there is no designated beneficiary or surviving spouse, then member contributions are returned. If there are dependent children but no surviving spouse, they may elect minimum survivor benefits of $250 per month plus $120 for the first child and $90 for each additional child.

c. <u>Refund of Contributions</u>:

Upon the death of a member not entitled to survivor benefits, the beneficiary is entitled to a refund of all member contributions with interest.

12. <u>Cost-of-Living Increases</u>

In accordance with the adoption of Chapter 17 of the Acts of 1997, the granting of a cost-of-living adjustment will be determined by an annual vote by the Retirement Board. The amount of increase will be based upon the Consumer Price Index, limited to a maximum of 3.0%, beginning on July 1. All retirees, disabled retirees, and beneficiaries who have been receiving benefits payments for at least one year as of July 1 are eligible for the adjustment. The maximum amount of pension benefit subject to a COLA is $12,000. All COLAs granted to members after 1981 and prior to July 1, 1998 are deemed to be an obligation of the State and are not the liability of the Retirement System.

13. <u>Postretirement Death Benefits</u>

Any benefits following the death of a member after retirement are based upon the form of benefit the participant elected at the time of retirement. There are three available forms as follows:

(i) Option A – Life annuity

(ii) Option B – Life annuity with death benefit equal to excess of member contributions plus credited interest to retirement over annuity benefit paid to member

(iii) Option C – Life annuity with 66-2/3% of benefit continued after death of member to designated joint annuitant

EXHIBIT 6 – ACTUARIAL METHODS AND ASSUMPTIONS:

The actuarial cost method, factors, and assumptions used in determining cost estimates are presented below.

1. Member Data

The member data used in the determination of cost estimates consist of pertinent information with respect to the active, inactive, retired, and disabled members of the employer as supplied by the employer to the actuary.

2. Valuation Date

January 1, 2007.

3. Actuarial Cost Method

The costs of the Plan have been determined in accordance with the individual entry age normal actuarial cost method.

4. Rate of Investment Return

It is assumed that the assets of the fund will accumulate at a compound annual rate of 8.25% per annum.

5. Salary Scale

It is assumed that salaries including longevity will increase at a rate of 5% per year.

6. Cost-of-Living Increases

Cost-of-living increases have been assumed to be 3.0% of the lesser of the pension amount and $12,000 per year.

7. Value of Investments

Assets held by the fund are valued at market value as reported by the Public Employees'

Retirement Administration Commission (PERAC). The actuarial value of assets is determined using a five-year smoothing of asset returns greater than or less than the assumed rate of return.

8. Annual Rate of Withdrawal Prior to Retirement

Based on an analysis of experience, the assumed annual rates of withdrawal may best be illustrated by the following rates at the following ages:

Service	General Employees	Police and Fire Employees
0	0.1500	0.0150
10	0.0540	0.0150
20	0.0200	0.0000
30	0.0000	0.0000

9. Annual Rate of Mortality

It is assumed that both pre-retirement and post retirement mortality are represented by the RP-2000 Mortality Table with projection scale AA for 10 years for males and females. Mortality for disabled members is represented by the RP-2000 Mortality Table set forward two years for all disabled members.

10. Service Retirement

Based on an analysis of experience, the assumed annual retirement rates are illustrated at the following ages:

Age	Male General Employees	Female General Employees	Male and Female Police and Fire Employees
50	0.0100	0.0150	0.02000
51	0.0100	0.0150	0.02000
52	0.0100	0.0200	0.02000
53	0.0100	0.0250	0.05000
54	0.0200	0.0250	0.07500
55	0.0200	0.0550	0.15000
56	0.0250	0.0650	0.10000
57	0.0250	0.0650	0.10000
58	0.0500	0.0650	0.10000
59	0.0650	0.0650	0.15000
60	0.1200	0.0500	0.20000
61	0.2000	0.1300	0.20000
62	0.3000	0.1500	0.25000
63	0.2500	0.1250	0.25000
64	0.2200	0.1800	0.30000
65	0.4000	0.1500	1.00000
66	0.2500	0.2000	1.00000
67	0.2500	0.2000	1.00000
68	0.3000	0.2500	1.00000
69	0.3000	0.2000	1.00000
70	1.0000	1.0000	1.00000

11. Annual Rate of Disability Prior to Retirement

Based on an analysis of experience, the assumed annual rates of disability may best be illustrated by the following probabilities at the following ages:

Attained Age	General Employees	Police and Fire Employees
20	0.0001	0.0001
30	0.0003	0.0003
40	0.0010	0.0030
50	0.0019	0.0125

In addition, it is assumed for the general employees that 45% of all disabilities are ordinary (55% are service connected). For police and fire employees, 10% of all disabilities are assumed to be ordinary (90% are service connected).

12. Family Composition

It is assumed that 80% of all members will be survived by a spouse and that females (males) are three years younger (older) than members.

13. Administrative Expenses

The normal cost is increased by an amount equal to the anticipated administrative expenses for the upcoming fiscal year. The amount for fiscal year 2007 is $425,000 and is anticipated to increase at 4.5% per year.

EXHIBIT 7 – GLOSSARY OF TERMS:

This glossary summarizes the technical terms contained in this report.

1. Actuarial Accrued Liability

That portion of the Actuarial Present Value of plan benefits that is not provided for by future employer Normal Costs or employee contributions.

2. Actuarial Assumptions

Assumptions as to the occurrence of future events affecting the Retirement System such as:

- Rates of investment returns
- Increases in a member's salary
- Inflation
- The probability of mortality, turnover, disablement
- Retirement at each age and other relevant items

3. Actuarial Cost Method

A procedure for allocating the Actuarial Present Value of pension plan benefits between Normal Cost and Actuarial Accrued Liability.

4. Actuarial Present Value

The single sum amount required at the valuation date that is required to provide for anticipated future events based upon the terms of the plan and the Actuarial Assumptions.

5. Forecast

A projection of future benefit payments or contribution requirements based upon the terms of the plan, the current asset amounts, the Actuarial Assumptions, and additional assumptions as to the replacement of terminating employees with new employees.

6. Normal Cost

That portion of the Actuarial Present Value of future benefits that is assigned to the current year.

7. Unfunded Actuarial Accrued Liability

That portion of the Actuarial Accrued Liability that is not provided for by current actuarial value of assets.

8. Valuation Method

The method used to divide the cost of future benefits among the Actuarial Accrued Liability, the current year's Normal Costs, and future years' Normal Costs. The resulting current funding requirement is then determined as the current year's Normal Cost plus the payment necessary to amortize the Unfunded Actuarial Liability.

9. Vested Liability

That portion of the Actuarial Present Value of Accrued Benefits that a member would be entitled to if the member terminated employment with the employer as of the valuation date.

CERTIFICATION:

This report fairly represents the actuarial position of the City of New Bedford Retirement System contributing as of January 1, 2007, in accordance with generally accepted actuarial principles applied consistently with the preceding valuation. In our opinion, the actuarial assumptions used to compute actuarial accrued liability and normal cost are reasonably related to plan experience and to reasonable expectations, and represents our best estimate of anticipated plan experience.

Buck Consultants, LLC

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Daniel W. Sherman, ASA, MAAA
Enrolled Actuary No. 05-4086

February 2008